

ABSTRACT OF THE DISCLOSURE

A cutting tool for a milling, drilling or turning machine has a body with a plurality of sides and a central opening. Each side has a perimeter along which cutting planes or edges are formed. Each side has at least two such cutting planes or edges. The planes may have a straight or curved profile, or a combination of straight and curved profiles along one side. The tool may have a plurality of such cutting planes formed along each side of the tool body. The cutting planes may be located at different levels in relation to each other, entering a work piece in sequence, or may be aligned to enter the work piece simultaneously. Preferably, the cutting planes are staggered in two directions – in a feeding direction and in a cutting direction. By dividing each surface being cut into a plurality of segments, the cutting tool creates a plurality of distinct shavings, or splinters that have shorter length in comparison with conventional splinters formed by indexable tips. Shorter cuts require less cutting force, which saves wear on the cutting tool and the machine. At the same time, the cuts can be made deeper and smoother when dividing the cutting surface into a plurality of segments.